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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/661,920	09/14/2000	Wilson Moya	MCA-474	9899

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EXAMINER
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VO. HAI

ART UNIT	PAPER NUMBER
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1771

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DATE MAILED: 01/23/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/661,920

Applicant(s)

MOYA, WILSON

Examiner

Hai Vo

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 1 and 8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-7 and 9-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 and 3 6) ☐ Other: \_\_\_\_\_

***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1 and 8, drawn to a process of forming a pattern of porous and reduced porosity areas on a porous structure, classified in class 264, subclass various.

II. Claims 2-7, and 9-24, drawn to a porous structure, classified in class 428, subclass 304.4+.

2. The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the product as claimed can be made by another and materially different process such as one wherein the openings of a porous structure are partially closed by applying a coating of the resin instead of heat treatment.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with John Dana Hubbard on 01/14/02 a provisional election was made without traverse to prosecute the invention of Group II, claims 2-

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7, and 9-24. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1 and 8 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

### ***Specification***

5. The specification is objected because the term "porous" after "a", page 6, line 9 is duplicate and should be deleted.

### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 2, 3 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Yokoyama et al (US, 5,370,836). Yokoyama discloses a porous fluoroplastic membrane having the pores partially compressed or partially closed with the coating of printing ink (column 2, lines 64-66). Figures 2a and 2b of Yokoyama meet every limitation of the claims. Yokohama anticipated the claimed subject matter.
8. Claims 2-3, 9, 14-16 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by FR 2 233 626. Figures 1-3 of FR'626 meet every limitation of the claims. Figure 1 shows a flat support **1** and the layer of PVC fibers (page 3) is divided into several surface zones **5**. Different surface zones **5A** are separated by zones **3A**. FR'626 anticipated the claimed subject matter.

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9. Claims 2-4, 9, and 14-21 are rejected under 35 U.S.C. 102(b) as being anticipated by FR 2 633 398. Figure 4 of FR'398 shows a test assembly comprising a porous membrane **3**, a foam layer **2** and a support **1**. The test assembly further comprises a plate **5** of synthetic material pierced with parallel cylindrical holes **6** arranged in a matrix (page 6). It is the examiner's position that the membrane portion onto which the biological macromolecule is fixed is found to be relatively more porous than the membrane portion onto which the perforated plate is applied. Figures 3 and 4 of FR'398 meet the recited limitations in claims 3 and 4. FR'398 anticipated the claimed subject matter.
10. Claims 2-4 and 21, 22 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 96/32635. WO'635 discloses a sheet of porous polysulfone having one or more compressed areas in the form of a ring thereon (figures 2 and 3 and example 1). With regard to claims 22 and 24, WO'635 discloses a porous substrate being coated on one side with two strips of platinum before a defined electrode area is prepared (example A). WO'635 anticipated the claimed subject matter.
11. Claims 2-4, 9-12, 14-24 are rejected under 35 U.S.C. 102(b) as being anticipated by EP 272 043. EP'043 discloses a diagnostic test device comprising a composite membrane comprising three layers, a reaction layer **13**, a sealing layer **17**, a barrier layer **17**, and a liquophobic zone **21** provided at the periphery of each well (figures 2 and 3). With regard to claims 14-16, EP'043 discloses both reaction layer and sealing layer being porous membranes (column 6, line 32 and column 9, lines 17-29).

With regard to claims 20 and 21, EP'043 discloses the composite membrane being made of polyamide (column 6, line 49). With regard to claims 22 and 24, EP'043 discloses the surface modifying polymer being used to prepare the composite membrane with controlled surface properties (column 7, lines 16-26). With regard to claim 23, EP'043 discloses the reaction layer being treated with suitable reagents at the time at which diagnostic tests are to be performed. EP-043 anticipated the claimed subject matter.

12. Claims 2-6, 9-12, and 14-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Fernwood et al (US 4,493,815). Fernwood discloses a biochemical test plate comprising an upper template with a plurality of apertures, a microporous membrane underlying the upper template, a gasket underlying the microporous membrane with apertures matching those of the upper template, a lower template underlying the gasket with a similar array of apertures matching those of both the upper template and the gasket (abstract and figure 1). Fernwood teaches the test plate comprising 96 circular wells in an 8X12 rectangular array (column 2, lines 60-61). Fernwood teaches the gasket being made of a resilient inert material (column 4, lines 4-6).

***Claim Rejections - 35 USC § 103***

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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**14.** Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over FR 2 233

626. FR'626 discloses the surface zone **5** formed in a shape of rectangular or square section (page 5). *In re Dailey*, 149 USPQ 47 (CCPA 1976), there is nothing on the record that convinces the examiner that the particular shape of the surface zone of the porous material is significant or is anything more than one of numerous shapes a person of ordinary skill in the art would find obvious for the purpose of providing the shape of the surface zone of the porous material, therefore, the shape of the surface zone of the porous material in itself would not render the claims patentable over FR'626. See *Graham v. John Deere Co.*,

**15.** Claim 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Yokoyama et al (US, 5,370,836) or FR 2 233 626 or FR 2 633 398 or EP 272 043. None of the cited prior art disclose the number of porous wells. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have altered the number of porous wells since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. It would have been obvious to the skilled artisan to have optimized the number of porous wells motivated by the desire to obtain an end product that is suitable for a variety of laboratory and analytical uses.

**16.** Claim 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fernwood (US 4,493,815). See obviousness rational in the paragraph above.


17. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over EP 272 043 or Fernwood (US 4,493,815). The prior art is silent as to the areas of porous and reduced porosity material varying from layer to layer. It is the examiner's position that the provision of adjustability where needed, is not patentable advance. *In re Brandt*, 20 C.C.P.A (patents) 1005, 64 F.2d 693, 17 USPQ 295.

### **Conclusion**

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (703) 605-4426. The examiner can normally be reached on Monday to Friday, 8:30 to 5:00 (EAST). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (703) 308-1261. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

HV  
January 15, 2002

  
BLAINE COPENHEAVER  
SUPERVISORY PATENT EXAMINER  
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